



FEMP's Technology-Specific Super Energy Savings Performance Contracts (Super ESPCs)

Tatiana Strajnic
Alternative Financing Team Lead
Federal Energy Management
Program



FEMP's Mission

To reduce the cost and environmental impact of the federal government by advancing energy efficiency and water conservation, promoting the use of distributed and renewable energy, and improving utility management decisions at federal sites.



FEMP's mission — helping agencies meet their federal energy management goals

- Reduce energy consumption
 - Standard building consumption per square foot to be reduced 30% by 2005 and 35% by 2010 relative to 1985
 - Industrial/laboratory consumption to be reduced 20% by 2005 and 25% by 2010 relative to 1990
- Expand use of renewable energy
 - 2.5% of federal facility electricity consumption by 2005
 - 2,000 solar energy systems by 2000; 20,000 by 2010
- Implement best management practices for water conservation in 80% of federal facilities by 2010
- Reduce greenhouse gas emissions 30% by 2010 compared to 1990

Purpose of FEMP's Tech-Specific Super ESPCs — Help agencies meet their goals

- Tech-Specific Super ESPCs are making energy-efficient and renewable energy technologies just as accessible and practical for federal agencies as more conventional, less efficient technologies.
- Access is key.





Technologies FEMP Chooses for Emphasis

- FEMP focus on technologies that
 - promise substantial energy savings
 - are well suited for application in federal facilities
 - are commercially available, and wanted by agencies, but not widely used in the federal sector
 - are perhaps not well enough established in the marketplace to be readily available through routine acquisition processes

DOE-FEMP's Technology-Specific Super ESPCs

- Geothermal Heat Pumps (GHPs)
- Biomass and Alternative Methane Fuels (BAMF)
- Photovoltaics (PV)
- Solar Thermal Concentrating Systems





Tech-Specific Super ESPC Strategy

- Financing
- Streamlined procurement
- Access to private-sector expertise
- Experienced, qualified FEMP Project Facilitators
- Unbiased technology experts who support Project Facilitators

Technical assistance from FEMP Services expands opportunities

- FEMP Services provides the trusted technical assistance and information that federal facility managers need to support decisions to invest in “advanced” technologies



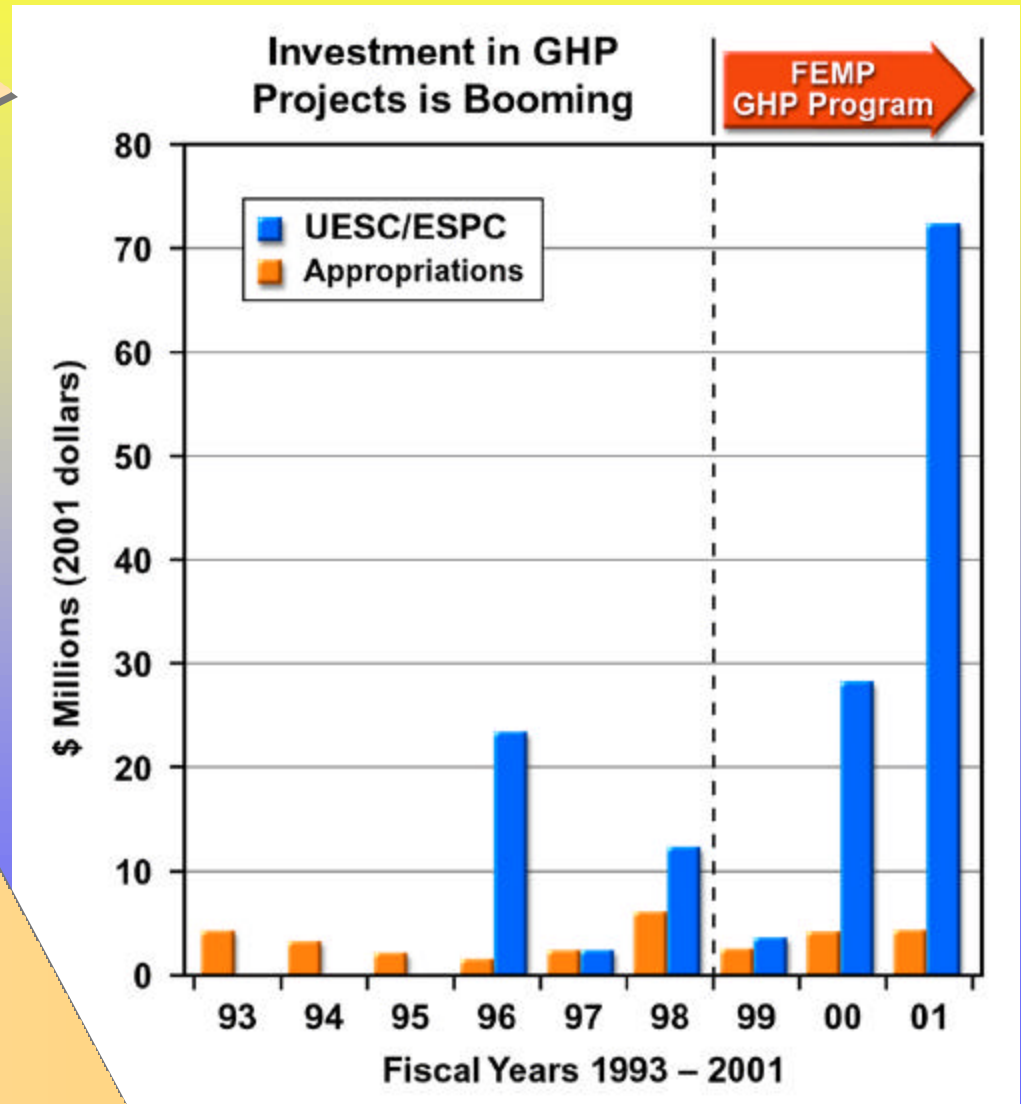
Sky-
rocketing
federal
GHP use

Hard
Data

Technical
Support

Access to
Financing

**FEMP's GHP program is a
tech-specific success**



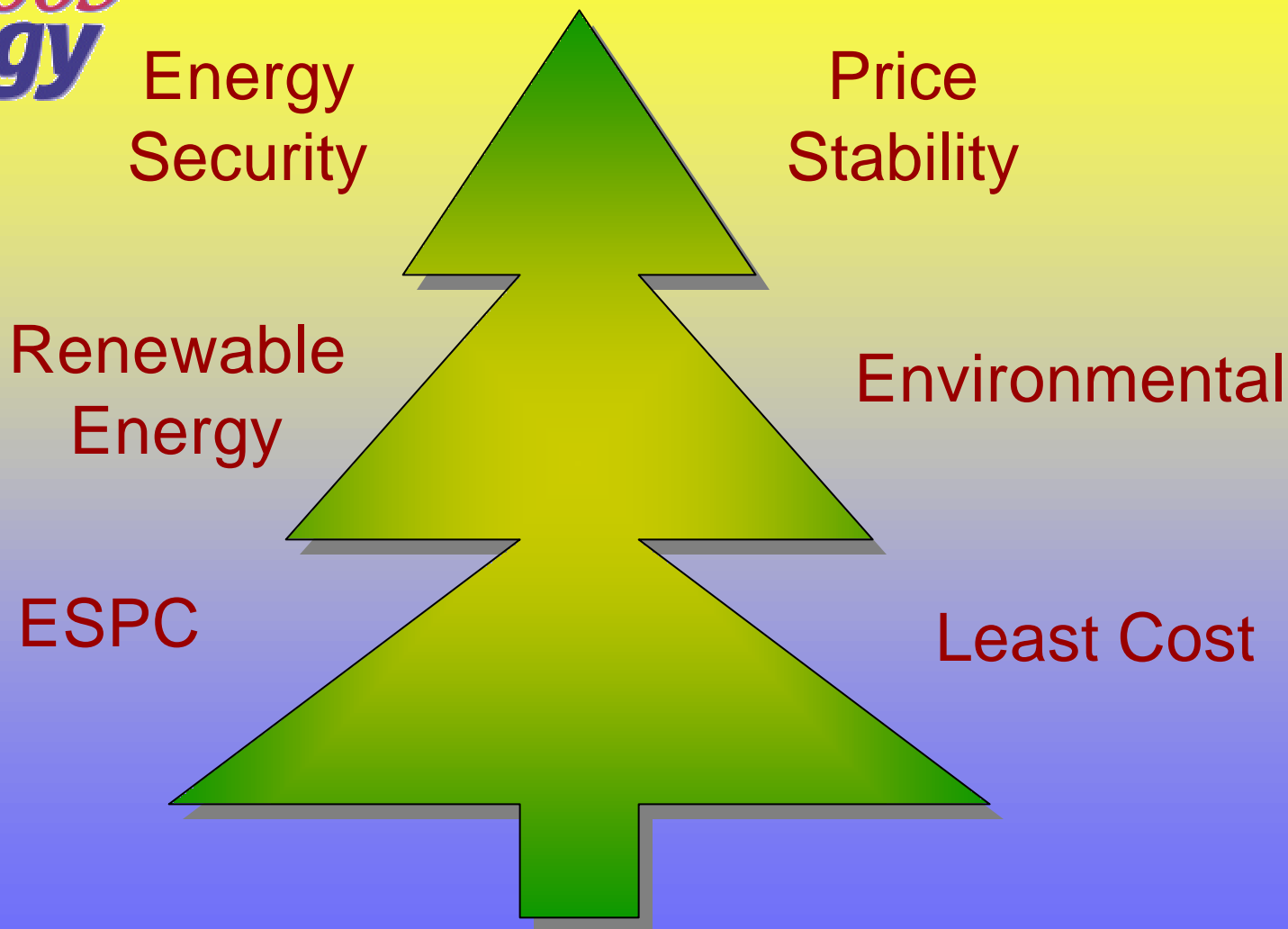


Biomass Tech Specific Super ESPC

Launched in Spring 2002

- ❖ Promotes goals of EO-13123 and EO-13134, "Developing and Promoting Biobased Products and Bioenergy"
- ❖ Biomass largest producer of renewable energy in U.S.
- ❖ Wide range of possible fuels (landfill gas, woodwaste, etc.) and end-use systems (fuel cells, boilers, microturbines, etc.)
- ❖ Early signs that, like the private sector, many federal agencies will adopt biomass energy systems for energy security and to avoid gas and electric price volatility.

BAMF Project Benefits

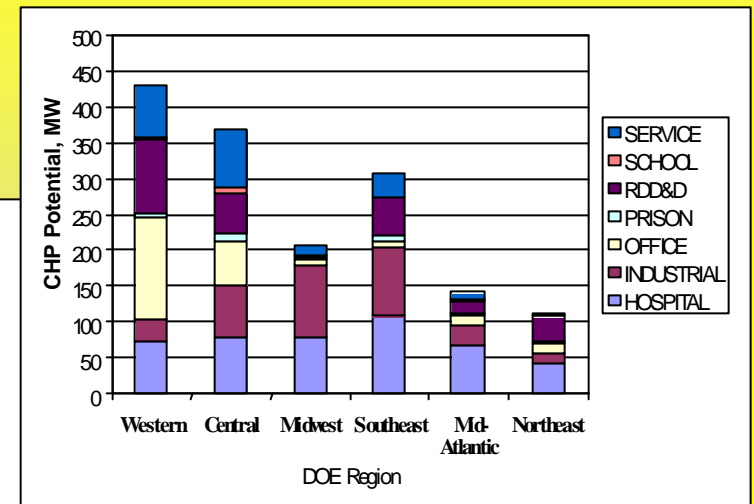
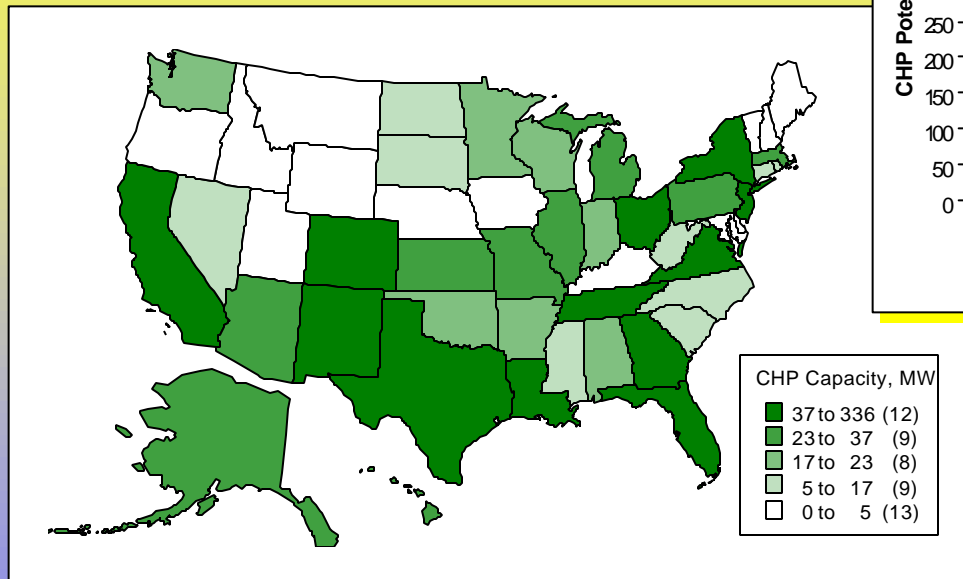




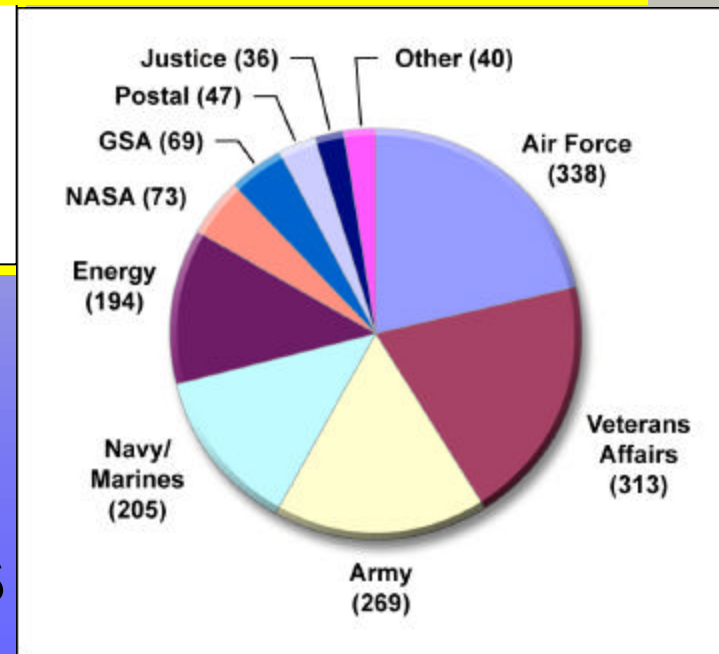
FEMP tech-specific efforts go beyond ESPCs

- FEMP tech-specific expertise for projects funded through utility contracts, appropriations, or ESPCs
 - Geothermal Heat Pumps (GHP)
 - Biomass and Alternative Methane Fuels (BAMF)
 - Distributed Energy Resources
 - Renewables — wind, photovoltaics, thermal solar
 - Combined Heat & Power (CHP)
 - Laboratories, fume hoods

CHP opportunities —



**2002 FEMP assessment
found 1600 MW CHP
potential in federal facilities**





With FEMP support, federal CHP projects are moving forward

- Super ESPC project at USMC base in Twentynine Palms
- Savings from 7-MW, dual-fuel cogeneration system are subsidizing a 1-MW PV system



http://www.eere.energy.gov/femp/financing/espc/getting_started.html

FEMP Reps in DOE Regional Offices

Western — Seattle RO

Scott Wolf

206-553-2405

scott.wolf@ee.doe.gov

Central — Denver RO

Sharon Gill

303-275-4846

sharon.gill@hq.doe.gov

Midwest — Chicago RO

Gordon Drawer

312-886-8572

gordon.drawer@ee.doe.gov

Northeast — Boston RO

David Mark

617-565-9725

david.mark@ee.doe.gov

Mid-Atlantic — Philadelphia RO

Tom Hattery

215-370-1362

thomas.hattery@ee.doe.gov

Christopher Abbeuhl (BAMF)

215-656-6995

christopher.abbuehl@ee.doe.gov

Southeast & GHP — Atlanta RO

Doug Culbreth

919-870-0051

carson.culbreth@ee.doe.gov



FEMP HQ Contacts

Skye Schell
FEMP Services Lead
(202) 586-9015

Tatiana Strajnic,
ESPC Program Leader
(202) 586-9230

FEMP Web Site

<http://www.eren.doe.gov/femp/>